



PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit:

Examiner:

P.D. File No.: H0004478

In re Application of: THOMAS Y-T. TAM ET AL.

Serial No.: 10/699,416

Filed: October 31, 2003

For: PROCESS FOR DRAWING GEL-SPUN POLYETHYLENE YARNS

Colonial Heights, VA 23834
December 18, 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 - 1.98

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56, applicant(s) hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO-1449 form which the Examiner may deem relevant to patentability of the claims of the above-identified application. One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed (1) no later than three months from the applications filing date or (2) before the mailing date of the first Office Action on the merits, and therefore no certification under 37 CFR §1.97(e) or fee under 37 CFR §1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Serial No. 10/699,416 Filed October 31, 2003

Applicants respectfully request that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP § 609.

Respectfully submitted,

By: Virginia Szigeti
Virginia Szigeti
Applicants' Attorney
Registration No. 29,039

Honeywell International Inc.
15801 Woods Edge Road
Colonial Heights, VA 23834
(804) 520-3651

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING
DEPOSITED WITH THE UNITED STATES POSTAL SERVICES AS
FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:
COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA
22313-1450

ON: December 18, 2003
DATE Virginia Szigeti
NAME OF APPLICANT, ASSIGNEE OR APPLICANT'S ATTORNEY
Virginia Szigeti
SIGNATURE
December 18, 2003
DATE

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO: H0004478	SERIAL NO.: 10/699,416
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Tam et al.	
(Use several sheets if necessary)		FILING DATE: 10/31/2003	GROUP:

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,411,854	10/25/1983	Maurer et al.	264	205	12/15/1981
	4,422,993	12/27/1983	Smith et al.	264	210.8	06/24/1980
	4,413,110	11/01/1983	Kavesh et al.	526	348	03/19/1982
	4,430,383	02/07/1984	Smith et al.	428	364	09/30/1982
	4,436,689	03/13/1984	Smith et al.	264	204	10/18/1982
	4,536,536	08/20/1985	Kavesh et al.	534	462	10/03/1983
	4,545,950	10/08/1985	Motooka et al.	264	210.8	12/28/1983
	4,551,296	11/05/1985	Kavesh et al.	264	177	01/20/1984
	4,612,148	11/16/1986	Motooka et al.	264	49	07/16/1985
	4,617,233	11/14/1986	Ohta et al.	428	364	05/21/1984
	4,663,101	05/05/1987	Kavesh et al.	264	178	01/11/1985
	5,032,338	07/16/1991	Weedon et al.	264	203	05/22/1989
	5,246,657	09/21/1993	Yagi et al.	264	210.6	05/13/1992
	5,286,435	02/15/1994	Slutsker et al.	264	205	12/31/1987

FOREIGN PATENT DOCUMENTS

							TRANSLATION	
	DOCUMENT NUMBER	DATE	PATENTEE OR APPLICANT	CLASS	SUBCLASS		YES	NO
	GB 2,042,414A	09/24/1980	Smith et al.	D01D5	04		X	
	EP 0 320 188 A2	06/14/1989	Takeda et al.	D01F5	04		X	
	JP-A-60/52647	08/30/1983	Toyo Boseki K.K.	D02J1	22			X
	JP 238416-1995	09/12/1995	Oh-ya	D01F	6/04		X	
	EP 0 077,590	04/27/1983	Kirschbaum et al.	D01D5	04		X	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	P. Smith et al., "Ultrahigh-Strength Polyethylene Filaments by Solution Spinning/Drawing, 2, Influence of Solvent on the Drawability" <u>Macromol. Chem.</u> , 180, 2983 (1979)
	P. Smith et al., "Ultra-high-strength Polyethylene Filaments by Solution Spinning/Drawing" <u>J. Matl. Sci.</u> , 15, 505, 1980
	Kalb et al., "Hot Drawing of Porous High Molecular Weight Polyethylene, <u>Polymer</u> , 21, 3 (1980)
	J. Smook et al., "Influence of Spinning/Hot Drawining Conditions on the Tensile Strength of Porous High Molecular Weight Polyethylene", <u>Poly. Bull.</u> , 2, 775 (1980)

EXAMINER

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO:
H0004478SERIAL NO.:
10/699,416INFORMATION DISCLOSURE
STATEMENT BY APPLICANTAPPLICANT:
Tam et al.

(Use several sheets if necessary)

FILING DATE:
10/31/2003

GROUP:

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,342,567	10/30/1994	Chen et al.	264	203	07/08/1993
	5,578,374	11/26/1996	Dunbar et al.	428	364	02/08/1995
	5,736,244	04/07/1998	Kavesh et al.	428	364	10/28/1995
	5,741,451	04/21/1998	Dunbar et al.	264	103	08/17/1995
	5,958,582	09/28/1999	Dunbar et al.	428	364	10/20/1998
	5,972,498	10/26/1999	Kavesh et al.	428	364	03/23/1998
	6,448,359	10/10/2002	Kavesh	526	352	03/27/2000

FOREIGN PATENT DOCUMENTS

							TRANSLATION	
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS		YES	NO

OTHER DOCUMENTS(Including Author, Title, Date, Pertinent Pages, etc.)

		J. Smook et al., "the Effect of Temperature and Deformation Rate on the Hot Drawing Behavior of Porous High-Molecular Weight PE Fibers", J.Appl. Poly.Sci.,27,2209 (1982)
		B. Kalb et al., "Spinning of High Molecular Weight PESolution and Subsequent Drawing in A Temperature Gradient", Poly. Bull., 1, 871 (1979)
		J. Smook et. al., "Elastic Flow Instabilities and Shish-Kebab Formation During Gel-Spinning Of Ultra-High Molecular Weight Polyethylene", J. Matl. Sci. 19, 31 (1984)

EXAMINER

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Rev. 3-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO: H0004478	SERIAL NO.: 10/699,416
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Tam et al.	
(Use several sheets if necessary)		FILING DATE: 10/31/2003	GROUP:

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

							TRANSLATION	
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS(Including Author, Title, Date, Pertinent Pages, etc.)

			A.J. Pennings et al., "Mechanical Properties of Ultra-High Molecular Weight PE Fibres in Relation to Structural Changes and Chain Scissioning Upon Spinning and Hot Drawing", <u>J. Matl. Sci.</u> , 19, 3443 (1984)
			J.P. Penning et al., "The Effect of Fibre Diameter on the Drawing Behaviour of Gel-Spun Ultra-High Molecular Weight PE Fibres", <u>Poly. Bull.</u> , 31, 243 (1993)
			P. Smith et al., "Ultradrawing of High Molecular Weight PE Cast From Solution. II. Influence of Polymer Concentration", <u>J. Poly. Sci., Poly. Phys. Ed.</u> , 19, 877 (1981)

EXAMINER

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.